Consultative Group on International Agricultural Research
Mailing Address: 1818 H Street, N.W., Washington, D.C. 20433, U.S.A.
Office Location: 801 19th Street, N.W.
Telephone (Area Code 202) 334-8021
Cable Address—INTBAFRAD

Hold For Release
May 28, 1989

Contacts: Annmaree O'Keeffe (062) 764960,
John Zubrycki (062) 764969;
USA--Ed Sulzberger (202) 334-8028

LOCUSTS AND OTHER PESTS TARGETED FOR BIOCONTROL

Canberra -- Controlling the desert locust without the use of chemicals is the most important task facing pest control researchers in Africa, according to representatives from 13 African countries who met recently in the West African country of Benin.

A swarm of desert locusts, migratory pests now sweeping across northern Africa, can consume up to 100 tons of vegetation in a single day.

Insect pathogens may be a safe alternative to the present blanket spraying of chemical pesticides, which harm other organisms such as bees and migrating birds, as well as locusts.

Biological control scientists are working to develop a biopesticide using the natural bacterial or fungal enemies of the locust. Such a biopesticide could be sprayed with much the same equipment and methods now used in chemical control.

Two Australian travelers made biological control famous in modern agriculture almost exactly 100 years ago. The first was the cottony cushion scale, a serious pest that devastated the orange groves of California until the second, its natural enemy the vedalia lady beetle, was found in Australia and 140 of them shipped to California.

The beetles thrived and rapidly reduced the cotton cushiony scale to the non-pest status it has in its native Australia. In effect, the natural, low level balance of pest and predator had been restored. Since then, vedalia has been equally effective in controlling cottony cushion scale in at least 32 countries.

Also high on the Africans' priority list of noxious pests to be attacked by biological control methods were the larger grain borer, a recent invader from Latin America, other cereal borers, and two weeds--water hyacinth, which clogs many inland waterways, and witchweed, a parasitic scourge of tropical Asia and Africa.

The possibility that efficient, environmentally sound biological control methods will be developed for these pests has been enhanced by the opening of an advanced research facility, specifically designed for biological control studies in Africa.

Building on its success in the control of the cassava mealybug, a major pest threatening the important staple crop cassava, the International Institute of Tropical Agriculture (IITA), headquartered in Ibadan, Nigeria, has established a US $3.6 million laboratory and insect rearing facility at Cotonou in the West African nation of Benin.

The cassava mealybug has reportedly caused US $5.5 billion damage in 31 African countries. The release of an effective biocontrol agent--a small wasp found in Paraguay--has cut the damage by an estimated 50 percent. Further reductions are anticipated as the wasp becomes better established in affected areas.

The IITA biological control program is based on the integration of research, training, and the development of national biological control programs. Since the establishment of biological control research at IITA, over 300 scientists have received either short-term or degree-related training within the program,

and 21 African countries have established their own biological control research programs under the guidance of IITA scientists.

At the present time, work on the cassava mealybug and the cassava green mite, which began in 1979 at the Ibadan station, is being continued at the new facility, and projects for the control of the mango mealybug and the larger grain borer, as well as pests of cowpea and maize, are under way.

IITA also plans to collaborate with CAB International Institute of Biological Control, Silwood Park, England, in research programs for the biological control of locusts and grasshoppers.

-0-